

# Reflection

P4

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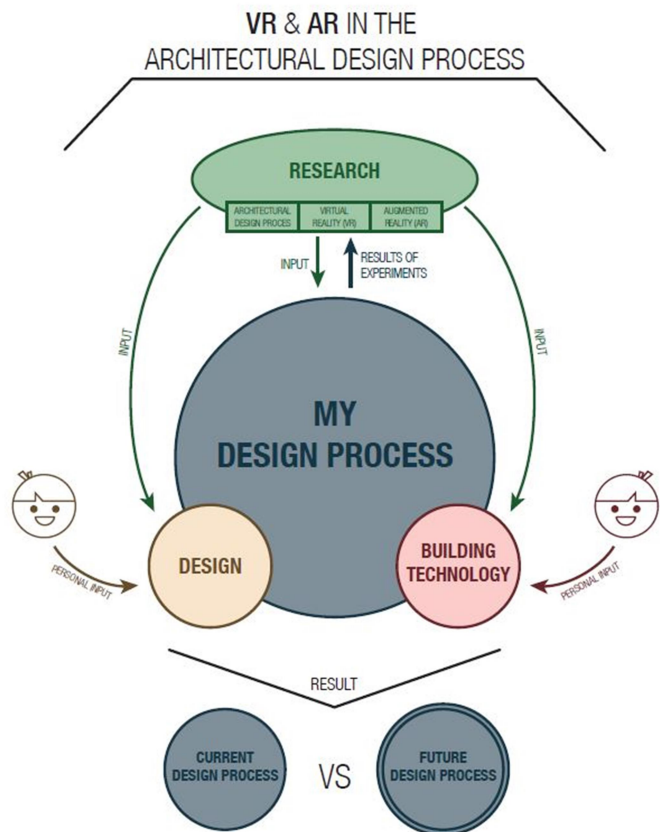
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For my graduation I am studying the impact of using VR & AR in the architectural design process. The project ultimately consists of three major parts: A theoretical framework, a set of VR & AR experiments, and the design.

The illustration on the right was the diagram I made before the P2. Where normally the design is the primary focus of the project I have the design process. This is because researching the design process is the main purpose of my graduation. The design, the research and the building technology (and myself) provide input for the design process. As a result I wanted to have a comparison between the current design process and the future design process, enabled by VR & AR.

The theoretical framework was a big reason for me to choose this subject for my graduation. I was very curious as to what VR & AR could offer, and how they could potentially affect the architectural practice. I must admit that I went a little bit overboard with the quantity of research done and written. However, I feel that this was a subject that needed a lot of attention and research, as it is a technology that will have a big impact, but has relatively little recognition from the architectural community.

The thesis is therefore very broad and has a less deep connection with the design than I would have hoped. However, I would not change the thesis, because as the way it is now it provides a very good overview of the impact of VR & AR on the design process, and that is what I think the architectural community needed most.

The VR & AR experiments were the practical framework of the research. This part of the research has a far deeper connection to the design, because they were set up as design steps in my own design process. It was a lot of fun to experiment with VR & AR, even though I underestimated the time they consumed. Especially with Augmented Reality I underestimated how young the technology really was. This made me simplify the experiments I could do with AR a couple of times. Even though it resulted in a lot of frustrations, I am glad that I set my goals too high, as it resulted in me pushing the boundaries.

For the design itself I wanted something that would have a simple program, but would still be relevant. I decided to design a Forum for the TU Delft, as I believe that it is a building that is very much needed to achieve the universities cultural ambitions. The location was actually chosen before the type of building, as I had already found a very nice green spot on the campus that would be perfect for AR experiments, and was located perfectly central to the campus.

The design process had a bit of a slow start, because I first wanted to make sure that the VR & AR experiments would work before I started designing. This took quite a long time, so I decided to just start with the design process in more traditional manner, which helped to get the process rolling. Incorporating the VR & AR experiments from thereon become easier, as I had more design input to work with. Especially in the later stages of the design process VR & AR became very useful and had a lot of influence on the design.

During my graduation process I knew there was some kind of connection between the VR & AR research and the University Forum design, but couldn't quite see it yet. And about a month ago I realized that they both have the same motivation behind them of trying to help others be creative. The VR & AR research is there to show architects the possibilities VR & AR have to enhance their creative capabilities, and the University Forum is there to bring people from different disciplines together so that they can stimulate each other's creativity.

All in all, I am very pleased with my graduation process, and very grateful that Explore Lab allowed me to do so in my own way.